

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-27. (Cancelled)

28. (Previously Presented) A method of making a metal matrix composite, the method comprising:

partially sintering ceramic particles to form a reinforcement preform having an average pore size of between 1-5 microns, an average interconnected porosity of between 35-45 vol.%, an approximately 100% open porosity, and a flexure strength of greater than 7 ksi; and infusing the partially sintered preform with a metal matrix material under pressure, the metal matrix material selected from the group consisting of aluminum, an aluminum alloy, magnesium or a magnesium alloy.

29. (Cancelled)

30. (Previously Presented) The method of claim 28 in which infusion includes pressure casting.

31. (Previously Presented) The method of claim 28 in which infusion includes squeeze casting.

32. (Original) The method of claim 28 in which the resulting metal matrix composite has a high temperature stiffness retention of at least 95% at temperatures up to 500°F.

33. (Original) The method of claim 28 in which the resulting metal matrix composite has a high temperature strength retention of at least 85% up to 500°F.

34. (Original) The method of claim 28 in which the ultimate tensile strength of the resulting metal matrix composite is at least 80 ksi in all directions.

35. (Original) The method of claim 28 in which the ceramic particles are substantially pure.

36. (Original) The method of claim 35 in which the ceramic particles are at least 99.0% pure.

37. (Original) The method of claim 28 in which the metal matrix material is selected to prevent chemical reaction with the preform.

38. (Original) The method of claim 28 in which the particles of the preform are selected from the group consisting of alumina and silicon carbide.

39. (Cancelled)

40. (Previously Presented) The method of claim 28 in which the aluminum is substantially pure aluminum.

41. (Cancelled)

42. (Cancelled)

43. (Previously Presented) The method of claim 28 in which the step of infusing the partially sintered preform with a metal matrix material under pressure includes pressure casting the partially sintered preform with the metal matrix material.

44. (Previously Presented) The method of claim 28 in which the step of infusing the partially sintered preform with a metal matrix material under pressure includes squeeze casting the partially sintered preform with the metal matrix material.

45-66. (Cancelled)